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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/674,798

10/01/2003

Hideyuki Oki

108426-00041

3687

4372

7590

01/11/2005

ARENT FOX KINTNER PLOTKIN & KAHN
1050 CONNECTICUT AVENUE, N.W.
SUITE 400
WASHINGTON, DC 20036

EXAMINER

CYGAN, MICHAEL T

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/674,798	Applicant(s) OKI ET AL.	
	Examiner Michael Cygan	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,6-11 and 16-20 is/are rejected.
- 7) ☒ Claim(s) 2-5 and 12-15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/01/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 6-10 and 16-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Cook (US 6,343,505 B1). Cook discloses the claimed invention, a method and means for performing the method for determining leakage in an evaporated fuel processing system for an automobile having an engine, canister, and fuel tank, the method (and means for performing the method) comprising detecting vapor pressure with sensors [74,282], detecting a stop of the engine (through pressure changes as detailed at column 8 lines 41-45 and 57-59), closing the vent-shut valve (through valve [92] which responds to pressure changes as detailed at column 8 lines 41+), determining leakage by comparison of pressure values with predetermined values of pressure duration (e.g., Figure 1), and prohibition (suspension) of the leakage determination when the pressure detected by the valve is not within value ranges allowing the valve to close (see column 11 lines 40-63). The valve comprises springs, and the pressure ranges are thus dependent on the

biasing force of the springs which determine the actuation pressures of the valve.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1, 6, 11, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoff (JP 11-336,626) in view of Shigihama (US 6,357,288 B1). Hoff teaches a method and means for performing the method for determining leakage in an evaporated fuel processing system for an automobile having an engine, canister, and fuel tank, the method (and means for performing the method) comprising detecting vapor pressure with a

differential pressure sensor (paragraph 9), detecting a stop of the engine (paragraph 9), closing the vent-shut valve in response to stoppage of the engine (paragraphs 8 and 9), determining leakage by comparison of pressure values with predetermined values of pressure duration (paragraph 3), and a control means (diagnostic) for receiving signals, closing the vent valve (paragraph 9), and determining leakage. See also applicant's specification at page 1. Hoff teaches the method, apparatus, programmatic steps, and means, except for use of a computer program and prohibition of leakage determination if the detected pressure is outside a predetermined range. Shigihama teaches the use of a microcomputer controlling a determination of leakage in an evaporated fuel processing system for an automobile having an engine, canister, and fuel tank; where the leakage determination is interrupted if the difference in pressure is outside a specified range; see abstract, column 2 lines 7-11, and column 5 lines 53+. It would have been obvious to one having ordinary skill to use a computer controlling the diagnosis which interrupts leakage determination, since Shigahama teaches that such outlying pressure values are the result of various factors which obscure proper leakage determination; see also column 1 lines 34-52.

Allowable Subject Matter

3. Claims 2-5 and 12-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including

all of the limitations of the base claim and any intervening claims, since the prior art neither discloses nor fairly teaches a control unit/program code which specifically bases the acceptable pressure range on the vent-shut pressure ranges.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dawson (US 6,073,487) teaches a leakage determination based upon values of the vent-shut valve. Yamaki (US 6,477,889 B2) and Iden (US 6,698,280 B1) teach leakage determination failure indication based upon computer control/analysis. Leakage detection is taught by Perry (US 6,502,560 B1). Valve setting in engines is taught by Morikawa (US 5,967,125). Engine stoppage detection is taught by Wakahara (US 6,807,851 B2), Saito (JP 02-130254) and Yuzuwa (US 4,505,248).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cygan whose telephone number is (571) 272-2175. The examiner can normally be reached on 8:30-6 M-Th, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Michael Cygan', with a stylized flourish at the end.

MICHAEL CYGAN, PH.D.
PRIMARY EXAMINER